

Energy Statistics

Consumption

Two common ways to account for energy consumption are by end-use sector and by fuel source.

Consumption and Ranking by End-Use Sector, 1997

Sector	United States (Trillion Btu)	Nebraska (Trillion Btu)	Rank
Residential	18,402.5	140.2	35
Commercial	14,918.1	121.8	33
Industrial	35,797.4	170.5	42
Transportation	24,945.6	184.6	37
Total Consumption	94,063.6	617.1	38

Consumption and Ranking by Source, 1997

Sector	United States (Trillion Btu)	Nebraska (Trillion Btu)	Rank
Coal	20,986.4	193.3	32
Natural Gas	22,691.1	131.9	39
Petroleum	36,382.5	239.4	38
Electricity	10,712.9	77.1	36

Consumption and Ranking Per Capita, 1997

United States (Million Btu)	Nebraska (Million Btu)	Rank
351.2	372.3	22

Total Consumption by Fuel Type

Year	(Trillion Btu)							Total Energy
	Coal	Natural Gas	Petroleum	Nuclear Electric Power	Hydro-Electric Power	Biofuels	Net Interstate Flow of Electricity	
1994	160.3	124.8	215.7	67.7	13.5	5.7	- 27.6	558.7
1995	179.5	133.7	218.5	79.8	14.7	7.0	- 51.0	580.3
1996	179.0	133.8	235.6	100.5	16.6	7.6	-67.3	604.4
1997	193.3	131.9	239.4	98.5	17.2	5.4	-67.3	617.1

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Pages 9, 17 and 18.

Consumption by End-Use Sector

(Trillion Btu)

Year	Residential	Commercial	Industrial	Transportation	Total
1994	130.1	116.8	154.1	157.7	558.7
1995	133.0	120.1	159.6	167.6	580.3
1996	140.5	123.2	160.1	180.6	604.4
1997	140.2	121.8	170.5	184.6	617.1

Consumption by Fuel Type and Sector, 1997

(Trillion Btu)

Fuel Type	Residential	Commercial	Industrial	Transportation	Electric Utilities
Coal	0.7	1.3	5.7	-	185.6
Natural Gas	47.0	33.8	44.4	4.1	2.7
Petroleum	5.6	2.1	50.7	180.5	.4
Nuclear Power	-	-	-	-	98.5
Hydroelectric Power	-	-	-	-	17.2
Biofuels	2.9	0.3	0.6	1.6	-
Electric Sales	27.3	27.3	22.4	-	-
Net Energy	83.6	65.0	123.9	184.6	-
Electrical System Losses	56.6	56.8	46.6	-	-

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Pages 9, 12, 13, 14, 15 and 16.

Expenditures

Expenditures are shown as a comparison between the United States and Nebraska for each fuel type. On page 40, expenditures are listed for years 1994 to 1997 by fuel type and by end-use sector and then by fuel type and end-use sector.

Nebraska Compared to the United States

	Measurement	United States	Nebraska	Rank
Overall:				
Prices	Dollars per Million Btu	8.28	7.93	32
Expenditures	Million Dollars	515,800	3,372	35
Expenditures Per Person	Dollars	1,962	2,057	21
Motor Gasoline:				
Prices	Dollars per Million Btu	9.14	9.15	32
Expenditures	Million Dollars	136,475	92.8	37
Expenditures Per Person	Dollars	519	566	21
Petroleum:				
Prices	Dollars per Million Btu	7.23	7.91	15
Expenditures	Million Dollars	237,491	1,730	35

Natural Gas:

Prices	Dollars per Million Btu	3.81	3.89	35
Expenditures	Million Dollars	74,150	506	34

Coal:

Prices	Dollars per Million Btu	1.37	0.78	50
Expenditures	Million Dollars	26,911	139	35

Electricity:

Prices	Dollars per Million Btu	20.30	15.82	40
Expenditures	Million Dollars	205,944	1,128	36

Total Expenditures by Fuel Type

(Million Dollars)

Year	Petroleum	Natural Gas	Coal	Nuclear Fuel	Biofuels	Electric Primary Total	Utility Fuel	Electricity Purchased By End-Users	Total
1994	1,676.5	509.1	128.8	49.1	4.8	2368.3	-172.9	1,090.5	3,232.0
1995	1,729.6	506.1	139.2	54.3	5.3	2,434.5	-190.2	1,127.9	3,372.2
1996	Information not available at this time								
1997	Information not available at this time								

Expenditures by End-Use Sector

(Million Dollars)

Year	Residential	Commercial	Industrial	Transportation	Utilities Electric	Total
1994	724.3	593.3	619.7	1,348.6	172.9	3,285.9
1995	738.9	591.3	615.0	1,427.0	190.2	3,372.2
1996	Information not available at this time					
1997	Information not available at this time					

Expenditures by Fuel Type and Consuming Sector, 1995

(Million Nominal Dollars)

Fuel Type	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total Expenditures
Coal	0.2	0.2	9.7	-	129.2	139.3
Natural Gas	217.6	158.6	124.9	*	5.1	506.2
Petroleum	32.5	11.6	256.9	1,429.0	1.5	1,729.5
Biofuels	4.5	-	0.6	-	0.1	5.2
Nuclear Power	-	-	-	-	54.3	54.3
Other	-	-	-	-	0.1	0.1
Total Primary	254.8	170.4	392.1	1427.0	190.2	2,434.5
Less Utility	-	-	-	-	-190.2	-190.2
Electric Expenditures	484.1	120.9	222.9	-	-	1,127.9
Total Expenditures	738.9	591.3	615.0	1,427.0	-	3,372.2

Source: *State Energy Price and Expenditures Report: 1995*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. August, 1998. DOE/EIA-0376(95). Pages 7-10, 183 and 184-188. Note: This table represents the most current information available. Note: * represents a value less than 0.05.

Consumption, Price and Expenditures by End-Use Sector

This section contains information on energy consumption, prices and expenditures for the residential, commercial, industrial, transportation and electric utility sectors. For the residential, commercial, and industrial sectors, a net total (less electrical system losses) is provided to indicate the energy actually consumed by these sectors. In addition, energy consumed in the generation, transmission, and distribution of electricity is allocated to each sector based on the electricity consumed by the sector. Thus, total consumption represents the energy consumed by the sector as well as that used to provide electricity to the sector.

Residential

The residential sector is considered to consist of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals and military barracks, are generally included in the commercial sector. Energy consumed by the residential sector is primarily for space heating, water heating, air conditioning, refrigeration, cooking, clothes drying and lighting. Motor vehicle fuel used by household members is included in the transportation sector.

Consumption

(Trillion Btu)

Year	Coal	Natural Gas	Heating Oil	Kerosene	Propane	Electricity	Net Energy	Electric System Losses	Total Energy
1994	0.1	43.7	0.9	*	4.0	25.2	77.5	52.5	130.1
1995	0.1	44.1	0.6	*	4.2	25.9	79.0	54.0	133.0
1996	*	49.3	0.7	*	5.0	26.4	85.6	55.0	140.6
1997	0.7	47.0	0.6	*	5.0	27.3	83.6	56.6	140.2

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Page 192. Note: * Represents a value less than 0.05.

Prices

(Dollars/Million Btu)

Year	Coal	Natural Gas	Heating Oil	Kerosene	Propane	Biofuels	Electricity	Average
1994	2.47	5.09	5.56	6.84	6.78	3.56	18.48	9.34
1995	2.44	4.93	5.92	7.28	6.84	3.56	18.68	9.35
1996	Information not available at this time							
1997	Information not available at this time							

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(97). Page 184. Note: This represents the most current information available.

Expenditures

(Million Dollars)

Year	Coal	Natural Gas	Heating Oil	Kerosene	Propane	Biofuels	Electricity	Total
1994	0.1	222.4	5.2	0.2	26.9	4.1	465.4	724.3
1995	0.2	217.6	3.3	0.2	29.1	4.5	484.1	738.9
1996	Information not available at this time							
1997	Information not available at this time							

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(97). Page 184. Note: This represents the most current information available.

Commercial

The commercial sector, as defined economically, consists of business establishments that are not engaged in transportation, manufacturing or in other types of industrial activity (agriculture, mining or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries and other service enterprises; religious and nonprofit organizations; health, social and educational institutions; and federal, state and local governments. Street lights, pumps, bridges and public services are included if the establishment operating them is considered commercial. Fuel consumed by motor vehicles used for commercial purposes is included in the transportation sector. Common uses of energy by the commercial sector include space heating, water heating, refrigeration, air conditioning and cooking.

Consumption

(Trillion Btu)

Year	Coal	Natural Gas	Petroleum	Electricity	Net Energy	Electric System Losses	Total
1994	0.1	38.4	3.1	24.4	66.3	50.9	117.2
1995	0.1	39.2	1.9	25.6	67.3	53.3	120.5
1996	*	41.1	2.4	25.8	69.8	53.7	123.5
1997	1.3	33.8	2.1	27.3	65.0	56.8	121.8

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Page 193. Note: * represents a value less than 0.05.

Prices

(Dollars/Million Btu)

Year	Coal	Natural Gas	Petroleum	Electricity	Total
1994	1.52	4.30	5.26	16.88	9.00
1995	1.52	4.04	6.11	16.46	8.85
1996	Information not available at this time				
1997	Information not available at this time				

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(97). Page 185. Note: This represents the most current information available.

Expenditures

(Million Dollars)

Year	Coal	Natural Gas	Petroleum	Electricity	Total
1994	0.2	165.1	16.1	411.8	593.3
1995	0.2	158.3	11.6	420.9	591.3
1996	Information not available at this time				
1997	Information not available at this time				

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(97). Page 185. Note: This represents the most current information available.

Industrial

The industrial sector consists of manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries and forestry. Establishments in this sector range from steel mills to small farms to companies assembling electronic components. Energy used by this sector to transport products to market or as inputs to the organizations is included in the transportation sector.

Consumption

(Trillion Btu)

Year	Coal	Natural Gas	Petroleum	Biofuels	Electricity	Net Total	Electric System Losses	Total
1994	7.9	36.5	53.0	0.6	18.2	116.2	38.1	154.2
1995	6.6	43.9	47.1	0.6	19.8	118.0	41.2	159.2
1996	5.4	36.4	51.2	0.6	21.1	114.8	44.0	158.7
1997	5.7	44.4	50.7	0.6	22.4	123.9	46.6	170.5

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Page 194.

Prices

(Dollars/Million Btu)

Year	Coal	Natural Gas	Petroleum	Biofuels	Electricity	Total Energy
1994	1.52	3.17	5.26	1.89	11.70	5.35
1995	1.48	2.85	5.45	1.89	11.26	5.23
1996	Information not available at this time					
1997	Information not available at this time					

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(97). Page 186. **Note: This represents the most current information available.**

Expenditures

(Million Dollars)

Year	Coal	Natural Gas	Petroleum	Biofuels	Electricity	Total Energy
1994	12.7	115.3	278.4	0.6	213.3	619.7
1995	9.7	124.9	256.9	0.6	222.9	615.0
1996	Information not available at this time					
1997	Information not available at this time					

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(97). Page 186. **Note: This represents the most current information available.**

Transportation

The transportation sector consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges and natural gas pipelines. Natural gas use reflects the fuel needed to move natural gas through the pipelines to end users in the residential, commercial, industrial and electric utility sectors.

Consumption

(Trillion Btu)

Year	Natural Gas	Aviation Gasoline	Diesel Fuel	Jet Fuel	Propane	Lubricants	Motor Gasoline	Total Petroleum	Biofuels	Total
1994	3.2	0.4	53.8	7.0	0.3	2.1	90.8	154.4	1.7	157.6
1995	3.3	0.4	58.8	5.7	0.1	2.1	97.3	164.3	2.0	167.6
1996	4.6	0.4	69.7	5.7	0.1	2.0	98.1	176.0	1.3	180.6
1997	4.1	0.5	72.0	6.1	0.1	2.1	99.8	180.5	1.6	184.6

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Page 195.

Prices

(Dollars/Million Btu)

Year	Natural Gas	Aviation Fuel	Diesel Fuel	Jet Fuel	Propane	Lubricants	Motor Gasoline	Total Petroleum	Total Energy
1994	4.74	7.96	8.21	3.99	9.11	19.11	9.17	8.73	8.73
1995	3.97	8.36	7.99	4.01	9.46	19.40	9.15	8.69	8.69
1996	Information not available at this time								
1997	Information not available at this time								

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Page 187. **Note: This represents the most current information available.**

Expenditures

(Million Dollars)

Year	Natural Gas	Aviation Fuel	Diesel Fuel	Jet Fuel	Propane	Lubricants	Motor Gasoline	Total Petroleum	Total Energy
1994	*	3.0	441.7	28.1	2.4	40.1	833.3	1,348.6	1,348.6
1995	*	3.2	469.8	22.7	0.8	40.0	890.5	1,427.0	1,427.0
1996	Information not available at this time								
1997	Information not available at this time								

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Page 187. **Note: This represents the most current information available. Note: * represents a value less than 0.05.**

Electric Utility

The electric utility sector consists of facilities which generate electricity primarily for use by the public and that meet the definition of an electric utility. Non-utility power producers are not included in the electric utility sector. Energy is used for the generation, distribution and transmission of electric power.

Energy Input at Electric Utilities

(Trillion Btu)

Year	Coal	Natural Gas	Petroleum	Nuclear Fuel	Hydro Power	Biofuels	Total
1994	152.2	3.0	0.3	67.7	13.5	0.1	236.9
1995	172.7	3.1	0.4	79.8	14.7	0.2	270.8
1996	173.5	2.3	0.3	100.5	16.6	0.1	293.3
1997	185.6	2.7	0.4	98.5	17.2	*	304.4

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Page 196. **Note:** * represents a value less than 0.05.

Prices

(Dollars/Million Btu)

Year	Coal	Natural Gas	Petroleum	Nuclear Fuel	Biofuels	Total
1994	0.77	2.05	3.98	0.73	0.86	0.77
1995	0.75	1.66	4.15	0.68	0.77	0.74
1996	Information not available at this time					
1997	Information not available at this time					

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Page 188. **Note:** This represents the most current information available.

Expenditures

(Million Dollars)

Year	Coal	Natural Gas	Petroleum	Nuclear Fuel	Biofuels	Total
1994	116.4	6.2	1.1	49.1	0.1	172.9
1995	129.2	5.1	1.5	54.3	0.1	190.2
1996	Information not available at this time					
1997	Information not available at this time					

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Page 188. **Note:** This represents the most current information available.

Resource Statistics

Natural Gas

Consumption by Sector

(Billion Cubic Feet)

Year	Residential	Commercial	Industrial	Transportation	Electric Utility
1994	44	39	37	3	3
1995	45	40	45	3	3
1996	49	41	36	5	2
1997	47	34	44	4	3

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Page 192-196.

Prices by Sector

(Dollars/Thousand Cubic Feet)

Year	Residential	Commercial	Industrial	Transportation	Electric Utility
1994	5.09	4.30	3.17	4.74	2.05
1995	4.93	4.04	2.85	3.97	1.66
1996	Information not available at this time				
1997	Information not available at this time				

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Pages 184, 185, 186 and 188. **Note: This represents the most current information available.**

Expenditures by Sector

(Million Dollars)

Year	Residential	Commercial	Industrial	Transportation	Electric Utility
1994	222.4	165.1	115.3	*	6.2
1995	217.6	158.6	124.9	*	5.1
1996	Information not available at this time				
1997	Information not available at this time				

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Pages 184, 185, 186 and 188. **Note: This represents the most current information available. Note: * Represents a value less than 0.05.**

Deliveries to Residential Consumers

(Million Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	8,455	8,562	6,098	4,020	2,328	1,179	1,014	935	1,037	1,523	3,169	6,076	44,396
1995	7,943	6,978	5,876	4,177	2,893	1,548	1,010	883	1,032	1,537	4,029	6,034	43,939
1996	7,729	8,165	6,165	4,435	2,434	1,373	937	884	974	2,192	4,079	7,347	46,714
1997	9,692	7,829	6,232	4,355	3,177	1,367	1,015	937	936	1,382	4,401	5,790	47,115
1998	7,929	6,666	6,505	4,339	1,968	1,202	1,011	1,030	883	1,623	3,386	4,230	40,771
1999	8,576	5,954	5,726	3,735	2,630	1,180	1,003	1,118	792	2,131	2,727	Information not available at this time	

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

Prices for Residential Consumers

(Dollars/Thousand Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
1994	4.86	4.72	4.97	5.09	5.39	6.10	6.32	6.54	6.26	5.60	4.85	4.57	5.01
1995	4.51	4.45	4.45	4.71	5.09	5.94	6.35	6.59	6.32	5.84	4.96	4.74	4.83
1996	4.78	4.73	4.94	5.12	5.65	6.36	7.24	7.56	7.33	6.04	5.42	5.78	5.34
1997	6.21	5.75	4.86	4.91	4.65	6.71	7.43	7.72	7.90	7.53	6.19	6.19	5.87
1998	5.10	4.90	4.71	5.06	5.96	6.35	6.83	7.08	6.87	5.71	4.74	4.60	5.13
1999	4.37	4.38	4.47	4.70	5.39	6.76	7.13	8.04	7.73	6.52	6.02		Information not available at this time

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Deliveries to Commercial Consumers

(Million Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	5,471	5,456	4,090	2,741	1,934	2,284	2,501	3,614	1,834	2,240	2,606	4,174	38,945
1995	5,286	4,799	6,061	2,985	2,374	1,753	3,868	4,744	n/a	n/a	n/a	n/a	40,044
1996	5,413	4,681	4,055	3,223	1,958	1,499	3,631	2,556	2,345	2,852	3,713	5,074	41,000
1997	5,907	4,845	4,117	3,190	2,430	1,728	5,042	2,896	1,868	2,351	3,487	4,247	42,107
1998	4,992	4,310	4,097	2,829	1,717	869	1,085	862	963	1,036	2,218	3,934	28,911
1999	5,797	4,246	3,484	2,308	1,827	1,123	1,074	772	1,067	1,156	1,787		Information not available at this time

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.
n/a stands for not available.

Prices for Commercial Consumers

(Dollars/Thousand Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
1994	4.48	4.36	4.52	4.55	5.34	3.80	3.72	3.69	3.79	4.04	3.95	4.07	4.24
1995	4.08	3.97	3.97	3.90	5.00	3.77	3.64	3.63	n/a	n/a	n/a	n/a	3.96
1996	4.20	4.53	4.37	4.34	5.40	4.26	4.16	4.37	3.35	4.93	4.03	5.38	4.47
1997	5.91	5.24	4.23	3.91	5.00	5.88	3.56	3.76	4.33	5.26	5.40	5.34	4.86
1998	4.29	4.18	5.77	4.16	4.00	3.67	3.68	3.51	3.31	3.50	3.74	3.77	4.25
1999	4.14	4.00	3.98	3.77	3.88	3.94	3.84	4.11	4.36	4.33	4.62		Information not available at this time

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.
n/a stands for not available.

Deliveries to Industrial Consumers

(Million Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	3,062	2,867	3,400	3,314	2,666	2,995	2,975	2,765	2,895	2,712	3,447	3,862	36,960
1995	3,632	3,231	3,434	3,283	3,214	2,960	4,055	3,524	3,150	2,810	3,744	2,894	39,932
1996	2,828	2,666	2,857	2,576	2,114	2,127	1,976	1,928	1,857	2,612	2,596	3,063	29,199
1997	3,135	3,257	3,426	3,404	2,580	2,484	1,207	2,627	2,050	2,697	1,923	3,723	32,514
1998	4,688	4,059	4,246	3,579	3,822	4,434	8,653	5,908	3,341	3,475	3,724	3,124	53,053
1999	4,240	3,330	3,098	1,178	2,565	2,700	5,432	3,949	4,465	3,600	2,490		Information not available at this time

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

Prices for Industrial Consumers

(Dollars/Thousand Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
1994	3.56	3.61	3.68	3.17	3.07	2.75	2.78	2.69	2.71	2.53	2.81	2.95	3.12
1995	2.95	2.89	2.90	2.67	2.67	2.58	2.63	2.90	2.74	2.49	2.32	2.85	2.73
1996	3.20	3.20	3.11	3.14	2.93	3.10	3.21	3.41	2.87	2.76	3.63	4.32	3.30
1997	5.16	4.14	3.19	2.66	2.77	3.02	3.09	3.38	3.48	4.15	4.32	3.97	3.74
1998	3.53	3.30	3.37	3.38	3.37	3.37	3.27	2.75	2.59	2.89	3.31	3.33	3.26
1999	3.35	3.12	3.21	3.05	3.14	3.41	3.16	3.50	3.68	3.63	4.10	Information not available at this time	

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

Deliveries to Electric Utilities

(Million Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	94	49	204	553	413	741	235	155	168	159	152	139	3,062
1995	85	68	205	134	113	211	483	782	198	246	269	265	3,059
1996	123	80	139	202	320	466	348	213	161	122	94	82	2,351
1997	31	77	81	172	108	218	878	364	263	354	77	34	2,656
1998	36	21	58	173	621	702	1,022	1,161	955	154	35	106	5,044
1999	40	44	118	344	201	745	1,895	767	242	138	104	Information not available at this time	

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

Prices for Electric Utilities

(Dollars/Thousand Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
1994	3.11	3.14	2.58	2.10	1.93	1.86	2.12	2.11	2.03	1.51	1.86	1.93	2.02
1995	2.09	1.90	1.90	1.60	1.94	1.96	1.50	1.54	1.58	1.50	1.67	1.91	1.65
1996	1.96	2.19	2.39	1.94	1.58	1.74	2.27	2.16	1.81	1.85	2.85	4.37	2.07
1997	3.22	3.20	2.29	1.89	1.89	2.00	2.32	2.49	2.98	3.21	4.29	4.94	2.58
1998	2.72	4.47	2.72	1.98	2.40	2.37	2.62	2.49	1.93	2.10	2.81	2.92	2.40
1999	2.28	2.79	1.37	2.46	2.72	2.63	2.59	3.24	3.05	2.89	Information not available at this time		

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

Deliveries to All Consumers

(Million Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	17,082	16,935	13,792	10,627	7,342	7,200	6,726	7,468	5,934	6,634	9,374	14,251	123,365
1995	16,946	15,076	13,577	10,579	8,594	6,472	9,415	9,933	9,817	10,925	18,971	N-A	132,923
1996	16,093	15,592	13,215	10,437	6,827	5,465	6,892	5,580	5,337	7,778	10,482	15,566	119,265
1997	18,765	16,008	13,855	11,121	8,296	5,797	8,142	6,824	5,118	6,785	9,888	13,794	124,391
1998	17,645	15,056	14,906	10,921	8,128	7,207	11,770	8,961	6,143	6,287	9,362	11,394	127,779
1999	18,653	13,574	12,426	7,565	7,223	5,749	9,405	6,605	6,566	7,025	7,109	Information not available at this time	

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

Average City Gate Price

(Dollars/Thousand Cubic Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
1994	2.73	2.92	3.17	2.95	3.94	3.85	3.38	3.50	3.28	3.22	2.65	2.38	2.98
1995	2.38	2.20	2.47	2.18	2.68	2.69	3.42	3.11	2.97	2.80	2.43	2.34	2.49
1996	2.66	2.45	2.71	3.04	3.41	3.50	3.30	4.83	2.69	2.93	3.11	3.99	3.06
1997	4.42	3.75	3.02	2.28	3.11	4.09	4.96	5.51	7.03	5.76	6.30	5.31	4.24
1998	3.00	2.70	2.98	3.20	3.73	2.98	3.65	3.01	2.90	3.03	2.84	3.10	3.02
1999	2.90	3.11	2.90	2.94	3.45	3.24	3.25	2.33	3.28	3.14	3.79	Information not available at this time	

Source: *Natural Gas Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

Summary Statistics for Natural Gas, 1996-1998

	1996	1997	1998
Number of Consumers:			
Residential	439,931	444,970	523,790
Commercial	61,117	51,661	63,819
Industrial	2,234	11,553	10,673
Average Annual Consumption per Consumer:			
(Thousand Cubic Feet)			
Residential	111	106	78
Commercial	668	655	453
Industrial	16,170	3,845	4,917
Average Prices for Natural Gas:			
(Dollars per Thousand Cubic Feet)			
Wellhead (Marketed Production)	1.43	1.53	1.30
Pipeline Fuel	2.10	2.54	2.01
City Gate	3.07	4.24	3.02
Delivered to Consumers:			
Residential	4.88	5.69	5.13
Commercial	4.47	4.88	4.25
Industrial	3.29	3.85	3.26
Vehicle Fuel	-	-	-
Electric Utilities	2.07	2.86	2.40
Delivered to Consumers:			
(Million Cubic Feet)			
Residential	48,989	47,105	40,771
Commercial	40,833	33,853	28,911
Industrial	36,125	44,418	53,053
Electric Utilities	2,351	2,656	5,044
Totals	128,297	128,031	127,779

Source: *Natural Gas Annual 1998*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. October, 1999. DOE/EIA-0131(98). Pages 146-147.

Petroleum

Consumption by Product

(Thousand Barrels)

Year	Motor Gasoline	Distillate Fuel	Jet Fuel	Aviation Gasoline	Kerosene	Propane	Residual Fuel	Other	Total
1994	18,043	15,692	1,259	76	21	3,080	215	1,449	39,834
1995	19,302	15,588	1,001	77	17	3,020	123	1,340	40,835
1996	19,474	17,033	1,007	75	19	3,485	170	2,177	43,441
1997	19,825	17,674	1,075	90	23	3,520	112	1,873	44,192

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Page 191.

NOTE: Other includes asphalt, road oil, lubricants, and other specialty products.

Consumption by Sector

(Thousand Barrels)

Year	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1994	1,256	600	9,652	28,281	45	39,834
1995	1,272	408	8,638	30,056	61	40,435
1996	1,514	505	9,292	32,082	47	43,440
1997	1,498	454	9,285	32,883	72	44,192

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Pages 192-196.

Expenditures

(Million Dollars)

Year	Motor Gasoline	Distillate Fuel	Jet Fuel	Propane	Residual Fuel	Other	Total
1994	869.7	623.6	28.1	79.7	2.8	72.6	1,676.5
1995	928.0	624.4	22.7	79.9	1.8	72.7	1,729.6
1996	Information not available at this time						
1997	Information not available at this time						

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Page 183. **Note: This represents the most current information available.**

NOTE: Other includes asphalt, road oil, aviation gasoline, kerosene, lubricants and other specialty products.

Expenditures on Petroleum Products by Sector

(Million Dollars)

Year	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1994	32.3	16.1	278.4	1,348.6	1.1	1,676.5
1995	32.5	11.6	256.9	1,427.0	1.5	1,729.5
1996	Information not available at this time					
1997	Information not available at this time					

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Pages 184-188. **Note: This represents the most current information available.**

Electricity

Consumption and Expenditures by Sector

Year	Consumption (Million Kilowatthours)				Expenditures (Million Dollars)			
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial	Total
1994	7,379	7,149	5,345	19,873	465.4	411.8	213.3	1,090.5
1995	7,597	7,494	5,802	20,893	484.1	420.9	222.9	1,127.9
1996	7,741	7,563	6,193	21,497	Information not available at this time			
1997	7,989	8,014	6,580	22,583	Information not available at this time			

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Pages 192-194. *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0376(97). Pages 184-186. **Note:** This represents the most current information available.

Utility Retail Sales to Ultimate Consumers by Sectors

(Million Kilowatthours, January-December, 1997 and 1998)

Sector	1997	1998
Residential	7,989	8,232
Commercial	6,500	6,700
Industrial	6,580	6,766
Others	1,514	1,450
All Sectors	22,582	23,149

Source: *Electrical Power Monthly*. Energy Information Administration. March, 1999. Page 59.

Coal

Consumption by Sector

(Thousand Short Tons)

Year	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1994	2	5	414	0	8,879	9,300
1995	3	6	339	0	10,048	10,396
1996	1	*	287	0	10,091	10,379
1997	41	77	296	0	10,796	11,210

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Pages 192-196. **Note:** * Represents a value less than 0.05.

Prices by Sector

(Dollars/Million Btu)

Year	Residential	Commercial	Industrial	Electric Utilities
1994	2.47	1.52	1.52	0.77
1995	2.44	1.80	1.48	0.75
1996	Information not available at this time			
1997	Information not available at this time			

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Pages 184-188. **Note:** This represents the most current information available.

Expenditures by End-Use Sector

(Million Dollars)

Year	Residential	Commercial	Industrial	Transportation	Electric Utilities	Total
1994	0.1	0.2	12.0	0.0	116.4	128.7
1995	0.2	0.2	9.7	0.0	129.2	139.3
1996	Information not available at this time					
1997	Information not available at this time					

Source: *State Energy Price and Expenditure Report, 1995*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1997. DOE/EIA-0376(95). Pages 184-188. **Note:** This represents the most current information available.

Crude Oil and Natural Gas Production

Crude Oil Production

Crude Oil Production, Wellhead Price, Producing Wells and Proven Reserves

Year	Production (Thousand Barrels)	Wellhead Price (Dollars per Barrel)	Producing Wells (As of December 31)	Proven Reserves (Million Barrels)
1994	4,217	13.60	1,489	22.0
1995	3,793	15.73	1,446	25.0
1996	3,543	19.30	1,402	28.0
1997	3,337	19.63	1,361	21.0

Sources: *Nebraska Oil Activity Summary, Annual Report.* Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Annual. *Petroleum Marketing Monthly.* Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly. *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves: 1998 Annual Report.* Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1999.

Monthly Crude Oil Production

(Thousand Barrels)

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
1994	377.4	335.2	368.9	330.1	365.5	346.8	357.9	355.2	346.1	351.9	337.2	345.0	4,217.1
1995	339.1	308.4	334.3	320.6	322.4	309.9	308.8	317.7	307.6	314.3	302.2	307.3	3,792.6
1996	298.6	284.1	305.9	293.0	298.1	295.6	300.5	297.4	290.7	302.9	286.5	290.5	3,543.8
1997	283.6	261.0	290.0	273.6	283.5	269.4	274.3	276.9	271.0	284.8	283.0	285.5	3,336.5
1998	286.1	269.0	293.4	284.5	290.2	267.5	258.1	256.1	245.8	255.8	236.6	230.8	3,173.9

Source: *Nebraska Oil Activity Monthly Summary.* Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Monthly.

Crude Oil Production by County

(Thousand Barrels)

Year	Banner	Chase	Cheyenne	Dundy	Frontier	Furnas	Garden	Harlan	Hayes	Total
1994	308.5	1.8	682.8	101.5	54.7	20.0	1.1	12.4	119.5	
1995	283.1	1.8	599.9	108.9	48.6	19.7	4.9	12.8	102.4	
1996	254.2	1.8	590.0	148.0	41.1	19.0	8.4	13.2	95.2	
1997	233.3	1.6	546.4	204.5	43.3	17.3	7.2	14.8	97.7	
Year	Hitchcock	Kimball	Lincoln	Morrill	Red Willow	Richardson	Scottsbluff	Sioux	Total	Total
1994	1,170.8	911.8	1.6	135.6	574.8	42.1	77.3	0.0	4,216.3	4,216.3
1995	1,069.0	800.9	2.8	120.6	525.8	29.2	61.7	0.0	3,793.8	3,793.8
1996	959.0	730.1	5.0	103.3	487.1	21.1	62.4	4.2	3,543.1	3,543.1
1997	861.7	700.9	3.7	94.0	433.9	17.7	55.3	3.6	3,336.8	3,336.8

Source: *Nebraska Oil Activity Annual Summary.* Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Annual.

Natural Gas Production

Natural Gas Production, Wellhead Price, Producing Wells and Proven Reserves

Year	Production (Million Cubic Feet)	Wellhead Price (Cents/Thousand Cubic Feet)	Producing Wells (As of December 31)	Proven Reserves (Billion Cubic Feet)
1994	2,093	160.0	76	67.0
1995	1,557	119.0	79	n/a
1996	1,328	118.0	77	n/a
1997	1,144	146.0	91	n/a

Sources: *Nebraska Oil Activity Summary, Annual Report*. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Annual. *Natural Gas Annual 1994, Volume 1*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. November, 1995. *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves: 1998 Annual Report*. Energy Information Administration, U.D. Department of Energy. Washington, D.C. December, 1999.

Notes: Nebraska reserves are included with a group of states, including Arizona, Illinois, Indiana, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee, Virginia and Washington.

n/a stands for not available.

Natural Gas Production by County

(Million Cubic Feet)

Year	Banner	Cheyenne	Deuel	Dundy	Garden	Kimball	Morrill	Scottsbluff	Total
1996	29.8	1,493.5	4.6	5.3	34.8	290.9	16.4	5.5	1,876.0
1997	27.8	1,329.9	56.7	0.5	1.9	234.7	13.4	4.7	1,669.7

Source: *Nebraska Oil Activity Annual Summary*. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Annual.

Well Drilling

There were 34 drilling permits issued in 1997 for exploratory wells, an increase of 142.9% from the 14 permits in 1996. Sixty-seven permits were issued for development wells in 1997, a 71.8% increase from the 39 issued in 1996.

Exploratory Well Permits Issued

(Number of Permits)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	2	2	4	1	4	1	2	3	5	4	2	6	36
1995	0	1	1	2	7	0	0	5	1	4	1	2	24
1996	1	1	1	0	1	0	1	3	1	1	2	2	14
1997	6	1	5	2	3	2	0	1	2	4	5	3	34

Source: *Nebraska Oil Activity Monthly Summary*. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Monthly.

Development Well Permits Issued

(Number of Permits)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1994	2	5	3	0	1	3	4	1	1	1	0	9	30
1995	3	2	1	0	5	2	5	2	1	3	3	1	28
1996	1	4	4	5	2	4	4	3	3	2	5	2	39
1997	5	5	4	4	6	4	1	2	12	10	4	10	67

Source: *Nebraska Oil Activity Monthly Summary*. Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Monthly.

Total Crude Oil Production and Wells Abandoned

Year	Stripper Wells (Number)	Stripper Wells Abandoned (Number)	Stripper Well Production (Thousand Barrels)	Total Crude Oil Production (Percent of)
1995	1,114	36	1,899.0	50.1
1996	1,004	112	1,949.0	55.0
1997	1,699	66	2,366.0	70.0

Source: Nebraska Oil and Gas Conservation Commission. Sidney, Nebraska. Monthly.

Ethanol Production

Ethanol Fuel Available for Sale and Its Market Share

Year	Gasohol Available for Sale (Thousand Gallons)	Market Share (Percentage)
1994	230,712	30%
1995	230,812	29%
1996	187,028	24%
1997	206,107	25%
1998	190,503	22%
1999	212,994	25%

Source: Nebraska Department of Revenue

Electricity Generation and Retail Sales

Electric Utility Net Generation by Fuel Type

	(Million Kilowatt-hours)	
	1994	1995
Coal	17,210	18,336
Petroleum	31	43
Natural Gas	206	409
Hydroelectric	1,672	1,682
Nuclear	9,269	8,259
Other	1	1

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. March, 1999. Pages 19, 20, 21, 22, 23, 24

Retail Sales to Ultimate Consumers by Sector

	(Million Kilowatt-hours, January-December)				
Year	Residential	Commercial	Industrial	Other	Total
1994	7,464	5,784	5,317	1,333	19,898
1995	7,714	5,957	5,723	1,501	20,894
1996	7,741	6,272	6,193	1,291	21,497
1997	8,005	6,489	6,696	1,562	22,752
1998	6,366	5,018	5,238	1,179	17,802

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. December, 1999. Page 57.

Hydro Power Generation

(Megawatthours)				
Plant	1995	1996	1997	1998
Central Nebraska Public Power and Irrigation District				
Jeffrey Canyon	105,307	121,779	131,917	134,963
Johnson No. 1	76,755	93,740	101,021	105,638
Johnson No. 2	97,340	121,429	132,219	134,706
Kingsley	98,330	103,077	149,275	133,636
Nebraska Public Power District				
Columbus	116,103	113,896	124,838	110,353
Kearney	10	71	949	800
Minnechaduza	0	0	0	0
Monroe	13,474	23,010	23,409	22,632
North Platte	126,358	154,527	175,605	184,694
Spencer	13,347	14,686	13,554	9,640
Spalding	0	0	0	0
U.S. Corps of Engineers				
Gavins Point	769,034	855,704	819,632	845,772
Totals	1,426,058	1,601,919	1,672,419	1,682,834

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Coal Plant Generation

(Megawatthours)				
Plant	1995	1996	1997	1998
Fremont	307,315	284,467	354,238	288,803
Grand Island	426,278	543,148	491,898	541,341
Hastings	409,031	428,559	401,150	439,471
Nebraska Public Power District				
Gentleman	7,200,000	7,376,307	8,796,280	8,574,112
Sheldon	1,300,885	1,349,685	1,366,990	1,378,892
Omaha Public Power District				
Nebraska City	3,412,970	3,186,887	2,750,477	3,978,323
North Omaha	2,214,715	2,871,722	3,048,047	3,000,323
Nebraska Total	16,079,519	16,040,775	17,209,080	18,201,265
Lincoln Electric System				
Laramie River ⁽¹⁾	1,070,829	1,153,638	1,084,657	1,289,822

Source: *Electric Power Monthly*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Monthly.

Note: ⁽¹⁾ Lincoln Electric System's ownership share of Laramie River plant in Wyoming.

Miscellaneous Statistics

Total Population

(Thousands)

Year	Population
1994	1,622
1995	1,635
1996	1,648
1997	1,657
1998	1,663

Source: *Statistical Abstract of the United States, 1999*. Bureau of the Census, U.S. Department of Commerce. Washington, D.C. Annual.

Irrigation Wells Registered and Acres Irrigated

Year	Acres Irrigated	Wells
1994	8,100,000	76,363
1995	8,100,000	76,976
1996	8,100,000	77,301
1997	8,100,000	78,373
1998	8,100,000	79,395
1999	n/a	80,182

Source: *Nebraska Agricultural Statistics*. Nebraska Department of Agriculture. Lincoln, Nebraska. Annual.

Consumer Price Index All Items, Fuel and Other Utilities, Motor Fuel and Energy

(1982-84 = 100)

Year	All Items	Fuel and Other Utilities	Motor Fuel	Energy
1994	148.2	122.0	100.4	104.7
1995	152.4	123.7	96.4	103.3
1996	156.9	129.4	108.6	112.2
1997	160.5	130.0	101.9	108.4
1998	163.0	126.6	86.2	98.9

Source: *Consumer Price Index*. Bureau of Labor Statistics.

Other Information

Approximate Heat Content of Petroleum Products

Product	(Million Btu/Barrel)	(Btu/Gallon)
Aviation Gasoline	5.048	120,190
Crude Oil	5.800	138,095
Distillate Fuel Oil	5.825	138,690
Jet Fuel, Kerosene Type	5.670	135,000
Kerosene	5.670	135,000
Lubricants	6.065	144,405
Motor Gasoline	5.253	125,071
Propane	3.836	91,333
Residual Fuel Oil	6.287	149,690

Source: *State Energy Data Report, Consumption Estimates, 1960-1994*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. October, 1996.

Approximate Heat Rates for Electricity

(Btu/Kilowatthour)

Consumption	Fossil Fuel Steam-Electric Power Plant Generation	Nuclear Power Plant Generation
3,412	10,272	10,676

Source: *State Energy Data Report, Consumption Estimates, 1960-1994*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. October, 1996. 1995 Preliminary Estimates. Nebraska Energy Office.

Notes: The heat content of a kilowatthour of electricity for consumption is 3,412 Btu regardless of the generation process. The heat content for a fossil fuel steam-electric power plant is assumed to be the average at all such U.S. power plants. This factor is also applied to convert hydroelectricity for distribution.

Approximate Heat Content of Natural Gas and Coal Consumed

Year	Natural Gas (Thousand Btu/Cubic Foot)		Coal (Million Btu/Short Ton)		
	Utility	Non-Utility	Residential and Commercial	Industrial	Electric Utility
1994	0.987	0.985	21.888	19.098	17.141
1995	0.998	0.980	20.321	19.359	17.188
1996	1.004	1.007	17.300	18.823	17.198
1997	0.998	0.998	17.332	19.080	17.190

Source: *State Energy Data Report, Consumption Estimates, 1997*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. September, 1999. DOE/EIA-0214(97). Pages 483, 485, 489, 491 and 493.

Degree Days

Heating Degree Days (HDD) are used to estimate the amount of energy required for residential space heating during the cool season. To calculate the HDDs, you must first find the mean temperature for the day. This is usually done by taking the high and low temperature for the day, adding them together and dividing by two. If the mean temperature is at or above 65°F, then the HDD value is zero. If the mean temperature is below 65°F, then the HDD amount equals 65 minus the mean temperature. For example, if the mean temperature was 55°F, then the HDD amount equals 10.

Cooling Degree Days (CDD) are used to estimate the amount of air conditioning usage during the warm season. To calculate CDDs, you must first find the mean temperature for the day. This is usually done by taking the high and low temperature for the day, adding them together and dividing by two. If the mean temperature is at or below 65°F, then the CDD value is zero. If the mean temperature is above 65°F, then the CDD amount equals the mean temperature minus 65. For example, if the mean temperature was 75°F, then the CDD amount equals 10. You can think of cooling degree days as the flip side to HDD.

For example, the following table displays historical HDD weighted by population. Using the 1990 census, these data are weighted by population to account for differences between more and less populous areas of Nebraska. This produces values that can be used to assess Nebraska's climate.

Heating Degree Days Weighted by Population

Nebraska, Monthly 1993-1997													
Year	J	F	M	A	M	J	J	A	S	O	N	D	Total
1993	1,458	1,267	922	548	217	62	15	15	202	449	944	1,083	7,182
1994	1,390	1,241	731	457	139	18	21	19	83	343	751	1,131	6,324
1995	1,284	894	833	571	324	45	3	1	135	412	889	1,149	6,540
1996	1,432	994	1,030	490	248	26	17	21	148	379	1,013	1,329	7,126
1997	1,386	1,001	743	616	281	26	6	19	78	371	888	1,098	6,513
1998	1,220	822	1,031	470	119	61	5	9	32	343	690	1,075	5,877
1999	1,267	806	806	464	193	51	0	18	140	Information not available at this time			
Normal	1,332	1,042	824	446	195	33	10	14	112	405	849	1,205	6,467

Sources: State, Regional, and National Monthly and Seasonal Heating Degree Days: Weighted by Populations, NOAA and Monthly State, Regional, and National Heating Degree Days Weighted by Population. NOAA.

Heating and Cooling Degree Day information for specific Nebraska locations is available by contacting the Nebraska Energy Office.

Conversion Factors

A conversion factor is a number that translates units of one system of measure into corresponding units of another system of measure. Conversion factors can be used to translate physical units of measure for various fuels into British Thermal Unit (Btu) equivalents. This is useful to assess how much heat can be generated from a given amount of an energy source such as coal, propane or kerosene. Other conversion factors are used to change from one unit of measure to another.

The following examples illustrate conversions:

- ◆ One barrel of crude oil is equivalent to 42 U.S. gallons. To find out how many gallons are in 100 barrels of crude oil simply multiply the number of barrels by the conversion factor (42) to obtain 4,200.
- ◆ How many Btu are in 150 gallons of kerosene? Looking at the table on page 57, there are 135,000 Btu per gallon of kerosene. Multiply 150 gallons of kerosene by 135,000 Btu for the answer of 20,250,000 Btu.

TO CONVERT FROM	TO	MULTIPLY BY
Barrels (oil)	Gallons (oil)	42
Btu	Joules	1054.8
Btu	Kilogram-calories	0.252
Btu	Kilowatt-hours	0.0002928
Btu/hr	Watts	0.2931
Btu/min	Horsepower	0.02356
Calories	Kilowatt-hours	1.16x10 ⁻⁰⁶
Foot-candles	Lumens/square meter	10.764
Gallons (oil)	Barrels (oil)	0.02380952
Horsepower	Kilowatts	0.7457
Horsepower	Watts	745.7
Joules	Btu	9.48x10 ⁻⁰⁴
Kilogram-calories	Btu	3.968
Kilowatts	Horsepower	1.341
Kilowatts	Watts	1000
Kilowatt-hours	Btu	3413
Lumens	Spherical candle power	0.07958
Therms	Btu	100,000
Tons (metric)	Pounds	2204.62
Tons (long)	Pounds	2240
Tons (short)	Pounds	2000
Watts	Horsepower	0.00134
Watts	Kilowatts	0.001
Watt-hours	Horsepower-hours	0.00134

Sources: Various, including *State Energy Data Report: Consumption Estimates*. EIA.